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EXAMINER
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NGUYEN, LUONG TRUNG

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

**JAN 25 2008**

**Technology Center 2600**

Application Number: 09/987,849  
Filing Date: November 16, 2001  
Appellant(s): VIINIKANOJA ET AL.

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Shawn P. Gorman  
For Appellant

**EXAMINER'S ANSWER**

It should be noted that this application has been transferred to Examiner Luong T. Nguyen,  
Art Unit 2622.

This is in response to the appeal brief filed 10/31/2007 appealing from the Office action mailed  
12/01/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments**

There are no amendment has been filed subsequent to the Non-Final Office Action dated 12/01/2006.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,690,417	Yoshida et al.	2-2004
2002/0155864	Wang	10-2002
6,373,524	Suda et al.	4-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claims 106, 108-110, 112, 113, 116-117, 119, 125-127, 129, 130, 131 and 133-137 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. (U.S. Patent 6,690,417).**

Referring to claim 106, the Yoshida reference discloses in Figures 1 and 3, a mobile terminal device (100) comprising: a unitary housing of the mobile terminal device comprising at least one telecommunications component and a camera system (See Col. 5, lines 23-30) comprising a lens module (108) which enables taking pictures with optical imaging properties given by the lens module, and a means for changing optical properties of the lens module (Yoshida et al. disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm (Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions manually, which changes the magnification of zoom lens 108, which corresponds to “a means for changing optical properties of the lens module”), the means being adapted to cooperate with the lens module of the camera system to enable taking pictures with changed optical imaging properties, wherein a part of the unitary housing comprises the means for changing optical properties (Yoshida et al. disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm

(Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions manually, it is clear that this mechanism is a part of the digital camera (a part of a unitary housing)).

Referring to claim 108, the Yoshida reference discloses wherein the part of the unitary housing (100) integrates an assembly of a plurality of means for changing optical properties (e.g., changing focal length for zooming and changing F number for setting optical apertures) each being adapted to cooperate with said lens module (108) of said camera system, wherein said assembly can be changed upon actuation (See Col. 7, lines 20-54).

Referring to claim 109, the Yoshida reference discloses wherein said means for changing optical properties comprises a lens (108).

Referring to claim 110, the Yoshida reference discloses wherein the camera system is built into said mobile terminal device as shown Figure 1.

Referring to claim 112, the Yoshida reference discloses wherein said mobile terminal device is a mobile phone as shown in Figures 1.

Referring to claim 113, the Yoshida reference discloses in Figures 1 and 3, a part of a unitary housing of a mobile terminal device (100) comprising at least one telecommunications component and a camera system, wherein the part of the housing comprises means for changing optical properties of a lens module (Yoshida et al. disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm (Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions manually, which changes the magnification of zoom lens 108, which corresponds to “means for changing optical properties of the lens module”) of a camera system of said mobile terminal device, wherein the camera module with the lens module (108) enables taking pictures with optical properties given by the lens module and the means are adapted to cooperate with the lens module of the camera system to enable taking pictures with changed optical imaging properties (See Col. 7, lines 35-45).

Referring to claim 116, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 108 and 113.

Referring to claim 117, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 109 and 113.

Referring to claim 119, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 113.

Referring to claim 125, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 106 and 113.

Referring to claim 126, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 109 and 125.

Referring to claim 127, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 110 and 120.

Referring to claim 129, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 120.

Referring to claim 130, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 106 and 113.

Referring to claim 131, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 106 and 130.

Referring to claim 133, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 108 and 130.

Referring to claim 134, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 109 and 130.

Referring to claim 135, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 110 and 130.

Referring to claim 136, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 111 and 130.

Referring to claim 137, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 130.



**Claims 120-124 and 143 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (U.S. Patent Publication 2002/0155864).**

Referring to claim 120, the Wang reference discloses in Figures 1-6, an apparatus for changing optical properties of a lens module of a camera system of a mobile terminal device, the module enables taking pictures with optical imaging properties given by the lens module, the apparatus being comprised by a part of a unitary housing of the mobile terminal device comprising at least one telecommunications component and the camera system, and the apparatus being adapted to cooperated with the lens module of the camera system to enable taking pictures with changed optical imaging properties (e.g., the mobile terminal device comprising at least one telecommunications component 10 and any other types of electrical components, such as display, digital camera, etc., to form a unitary housing as showing Figures 1-6, see page 2, [0023]. It should be noted that the digital camera has means for changing optical properties of a lens module, such zooming and focusing operation as well known in the art).

Referring to claim 121, the Wang reference discloses wherein the part of unitary housing is detachably connected with the camera system as shown in Figure 6.

Referring to claim 122, the Wang reference discloses wherein the apparatus for changing optical properties comprises a lens as shown in Figure 6.

Referring to claim 123, the Wang reference discloses wherein the unitary housing is a housing of an external camera system attached to the mobile terminal device as an external module as shown in Figure 6.

Referring to claim 124, the Wang reference discloses wherein the mobile terminal device is a mobile phone as shown in Figures 1-6.

Referring to claim 143, the Wang reference discloses in Figures 1-6, a mobile terminal device comprising a camera system (40) as shown in Figure 6; a part of a unitary housing of the mobile terminal device comprising the camera system and at least one telecommunications component (10), wherein the part of the housing is detachable from the mobile terminal device and comprises at least part of a lens module adopted to cooperate with said camera system (e.g., the mobile terminal device comprising at least one telecommunications component and any other types of electrical components, such as display, digital camera, etc., to form a unitary housing as showing Figures 1-6, see page 2, [0023]).

**Claims 107, 114, 115 and 132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (U.S. Patent 6,690,417) in view of Suda et al. (U.S. Patent 6,373,524).**

Referring to claim 107, the Yoshida reference discloses all subject matter as discussed with respect to claim 106, except that the Yoshida reference does not explicitly show the means changing optical properties is detachably connected with said camera system.

The Suda reference teaches in Figure 1, an interchangeable lens assembly (127) camera system including zoom and focus lenses (102 and 105), motors (121 and 125) for driving the zoom and focus lenses and controlled by motor control circuit (118) as providing the means for changing optical properties; and the interchangeable lens assembly is detachably connected with the camera system (camera main body 128, see Col. 5, lines 49-60). The Suda reference is evidence that one of ordinary skill in the art at the time to see more advantages the digital camera system having an interchangeable lens assembly (including means changing optical properties) detachably attached to the camera main body so that the camera system can easily work with different types interchangeable lenses (See Col.3, lines 9-21). For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera system of Yoshida ('417) by providing means changing optical properties is detachably connected with the camera system as taught by Suda ('524).

Referring to claim 114, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claims 107 and 113.

Referring to claim 115, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claims 107 and 113, and Suda reference discloses wherein said part of said housing (camera) is detachably connected to a lens module.

Referring to claim 132, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claims 107 and 130.

**Claims 138-142 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (U.S. Patent 6,690,417) in view of Wang (U.S. Patent Publication 2002/0155864).**

Referring to claim 138, the Yoshida reference discloses all subject matter as discussed with respected to claim 130, except that the Yoshida reference does not explicitly Show wherein the part of the unitary housing is detachably connected with the camera system.

The Wang reference teaches in Figures 1-6, a part of a unitary apparatus comprising a camera component (40) and mobile terminal component (10); the camera system can be either attachable/detachable with body of mobile terminal system (See page 2, [0023]). The

Wang reference is evidence that one of ordinary skill in the art at the time to see more advantages the system having more flexible design options to attach/detach the camera system with body of mobile terminal system so that the expandability of the communication component may be greatly enhanced with full functions of other electrical device, such as digital camera, large display, MP3 player, etc.. For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera system of Yoshida ('417) by providing the part of the unitary housing is detachably connected with the camera system as taught by Wang ('524).

Referring to claim 139, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 121 and 130.

Referring to claim 140, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 122 and 130.

Referring to claim 141, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 123 and 130.

Referring to claim 142, the Yoshida and Wang references disclose all subject matter as discussed with respected same comments to claims 124 and 130.

#### **(10) Response to Argument**

The Appellants' arguments respect to rejection of claims 121, 123, 139, and 143 under 35 U.S.C. 112, first paragraph has been considered and is persuasive. The rejection of claims 121, 123, 139, and 143 under 35 U.S.C. 112, first paragraph has been withdrawn.

In re pages 15-16, Appellants argue that lens 108 cannot be the lens module of the camera system that provides optical imaging properties and also a means for changing the optical properties of the same lens.

In response, regarding claim 106, Appellants recited limitation "... a camera system comprising a lens module which enables taking pictures with optical imaging properties given by the lens module; and a means for changing optical properties of the lens module." The Examiner considers that Yoshida et al. does disclose this limitation. Yoshida et al. discloses lens 108 as a lens module which taking pictures with optical imaging properties given by the lens module (Figure 1, Col. 5, lines 23-30; Column 7, lines 26-45); Yoshida et al., further, disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm (Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions

manually, which changes the magnification of zoom lens 108, which corresponds to “a means for changing optical properties of the lens module.”

In re page 16, Appellants argue that there is no teaching in Yoshida that “a part of the unitary housing comprises the means for changing optical properties.”

In response, regarding claim 106, Appellants recited limitation “wherein a part of the unitary housing comprises the means for changing optical properties.” The Examiner considers that Yoshida et al. does disclose this limitation. Yoshida et al. discloses lens 108 as a lens module which taking pictures with optical imaging properties given by the lens module (Figure 1, Col. 5, lines 23-30; Column 7, lines 26-45); Yoshida et al., further, disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm (Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions manually, which changes the magnification of zoom lens 108, which corresponds to “a means for changing optical properties of the lens module.” It is clear that this mechanism is a part of the digital camera 100 (a part of a unitary housing).

In re page 18, Appellants argue that there is no teaching in Wang that “by a part of a unitary housing of the mobile terminal device comprise at least one telecommunications component and the camera system” as recited in both independent claims 120 and 143.

In response, regarding claims 120 and 143, Appellants recited limitation “by a part of a unitary housing of the mobile terminal device comprising at least one telecommunications component and the camera system.” The Examiner considers that Wang does disclose this limitation. Wang discloses the communication module 10 is coupled to digital camera 40 (Figure 6, paragraph [0023]), this means that when the communication module 10 and digital camera 40 are attached together, they are considered as a unit, which located in a unitary housing.

It is critical to note that the PTO must give claim words their broadest reasonable meaning in their ordinary usage, as understood by one of ordinary skill in the art. **In re Morris**, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997). In this case, the term “unitary” is reasonably construed by the examiner to mean creating a whole. Therefore, when the communication module 10 and the digital camera 40 of Wang are coupled together, the resulting unit is made whole, thus creating a unitary (whole) housing. Appellant seems to assert that the term “unitary housing” implies a single, one-piece housing, however, a single, one-piece housing is not what is claimed and at issue.

In re page 18, Appellants argue that there is no teaching in Wang of the housing of the mobile terminal “being adapted to cooperate with the lens module of the camera system to enable taking pictures with changed optical imaging properties.”

In response, regarding claim 120, Appellants recited limitation “the apparatus being adapted to cooperate with the lens module of the camera system to enable taking pictures with



changed optical imaging properties.” The Examiner considers that Wang does disclose this limitation. Wang discloses the digital camera 40, which included lens module for taking pictures and means for changing optical properties of the lens module, such as zooming and focusing operation as well known in the art.

In re page 19, Appellants argue that “Suda is not directed to cameras within a mobile terminal.”

In response, the Examiner considers that Yoshida et al. does disclose a mobile terminal device which comprises a camera system (digital camera 100, Figure 1, Col. 5, lines 20-30).

In re page 19, Appellants argue that “Suda does not teach, discloses, or otherwise suggest a portion of a terminal housing that is detachably connected with a camera system.”

In response, regarding claim 107, Appellants recited limitation “the means for changing optical properties is detachably connected to the camera system.” The Examiner considers that claim 107 as recited still does not distinguish from Yoshida et al. in view of Suda. Yoshida does not explicitly show the means for changing optical properties is detachably connected to the camera system. However, Suda teaches in Figure 1, an interchangeable lens assembly (127) camera system including zoom and focus lenses (102 and 105), motors (121 and 125) for driving the zoom and focus lenses and controlled by motor control circuit (118) as providing the means for changing optical properties; and the interchangeable lens assembly is detachably connected with the camera system (camera main body 128, see Col. 5, lines 49-60).

In re page 19, Appellants argue that regarding Wang, there can be no teaching of at least “a unitary housing comprising a camera system having a lens module... and at least one telecommunications component” as recited in claim 130.

In response, regarding claim 130, it should be noted that claim 130 is rejected under 35 U.S.C. 102 (e) as being anticipated by Yoshida et al. not by Wang as Appellants argued; and Appellants recited limitation “a unitary housing comprising a camera system having a lens module, which enables taking pictures with optical imaging properties given by the lens module and at least one telecommunications component.” The examiner considers that Yoshida et al. does teach this limitation. Yoshida et al. disclose digital camera 100 is provided with the communication function, lens 108, Figure 1, Column 5, lines 24-30).

In re page 20, Appellants argue that combining Wang with Yoshida still would not produce or suggest the subject matter of the rejected claims.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

**(11) Related Proceeding(s) Appendix**

Application/Control Number:  
09/987,849  
Art Unit: 2622

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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

Luong T. Nguyen LN


Conferees:

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